ACROPRINT®
Time for Business.™

ATR240

Top Loading
Time Card Recorder

User Manual

Lithium Battery Caution:

The circuit board on this terminal is populated with a lithium battery to protect data or programs stored in the Random Access Memory (RAM). Do not, under any circumstances, attempt to replace the lithium battery in the terminal. Failure to comply may void your warranty. Battery replacement should be done by qualified personnel wearing the proper eye protection.

CAUTION: Danger of explosion if the battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Discard used batteries according to the manufacturer's instruction.

This product utilizes a battery that contains Perchlorate Material. Perchlorate Material – special handling may apply, See www.dtsc.ca.gov/hazardouswaste/perchlorate

Table of Contents

Before You Start! **1**
What's In the Box 1
Clock Overview **3**
Top View 3
Front View 3
Rear View 4
Initial Setup **4**
Features and Specifications **7**
Clock Features 7
Clock Specifications 7
Miscellaneous 7
Ribbon Life 8
Operational Battery Pack 8
Internal View 8
Re-setting Time Recorder to Factory Defaults 9
Troubleshooting **9**
Frequently Asked Questions 10
Maintenance **11**
Replacing the Ribbon Cassette 11
Replacing the Circuit Board Batteries 12
Installing the Operational Battery Pack 13
Cleaning the ATR240 13
Appendix **14**
Connecting External Signal Devices (Bells & Horns) 14
Wall Mounting Instructions 15
Supplies, Parts & Accessories 15

Before You Start!

What's In the Box

- ATR240 Time Recorder
- (2) Clock Cover Keys
- 18vDC Switching Power Supply
- User Manual
- (25) Sample ATR241 Weekly Time Cards
- Clock Wall Mounting Template
  (Also available for download at http://support.acroprint.com/)
- (2) Mounting Screws
- (2) Plastic Wall Anchors

1) Unpack clock. Inspect clock for any damages that may have occurred during shipment. Check box contents for any missing items. If any damages are found or if any parts are missing please contact Acroprint Customer Service at (800) 334-7190.

2) Connect the ATR240 power adapter and plug it into a wall outlet to turn the clock on.

3) If this is the first time you've turned the clock on, open the Ribbon Access Door with the key and, using a ball point pen, press the Reset button.

Do not attempt to service the ATR240 yourself. Disassembling the clock will void the warranty. Always follow the instructions in the user guide.

- Do not place the clock in direct sunlight as this could discolor the housing over time.
- The clock is designed for indoor use in a temperature range of 32-104º F (0-40º C). The clock is not waterproof or shockproof. Keep the clock away from heat sources such as radiators. Avoid dusty environments or exposure to chemicals.
- The clock may be placed upright on a solid surface or mounted to a wall with mounting screws. Use the enclosed template & screws for wall mounting. Avoid locations where the device will be subject to vibrations and shock such as a slamming door.
- The clock warranty does not cover defects or damages caused by improper installation, improper storage, abuse, ordinary wear, or unauthorized service.

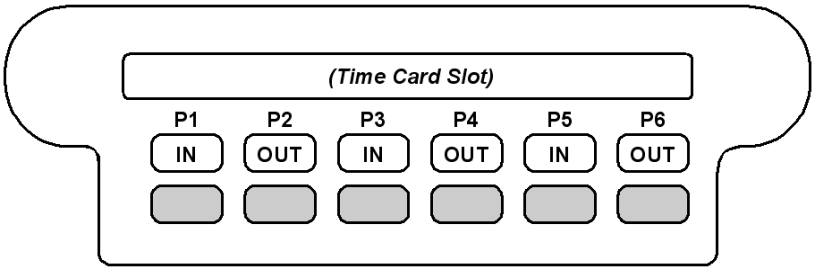
Time Recorder Mode Settings

Mode	Setting	Values	Default Value
01	Year	2000 – 2099	Year of Mfg
02	Date	1-12 Mo, 1-31 Date	01, 01
03	Time	1-23 Hr, 0-59 Min	12 : 00
04	End of Day Change Time	1-23 Hr, 0-59 Min	00 : 00
05	Set Card Format (Set "00" for ATR241 cards)	00: first row blank 01: prints on 1st row	00
06	Pay Period Type *End Day of Wkly P.Period Must set 07 for Wkly Card	00: Mthly, 01: Wkly 01=Mon…07=Sun	01 07
07	Clock Display Format	12 or 24 Hr	12
08	Adjust Printing Position Max: 6mm Vert/Horiz adj. Increase #'s to move up/right	00-15: Vertical Axis 00-30: Horiz. Axis	08,08 ↑ ↑ vert, horiz
09	DST Start Month / Date DST Start Time	1-12 Mo, 1-31 Date 00-23 Hr	00, 01 02
	DST End Month / Date DST End Time	1-12 Mo, 1-31 Date 00-23 Hr	00, 01 02
10	Print Format (Independent of display format)	00: 24 Hr 01: Decimal Hrs 02: 12 Hr (pm)	02
11	Time Card Recognition Note: Turn "On" for Mthly cards	00: On, 01: Off	01

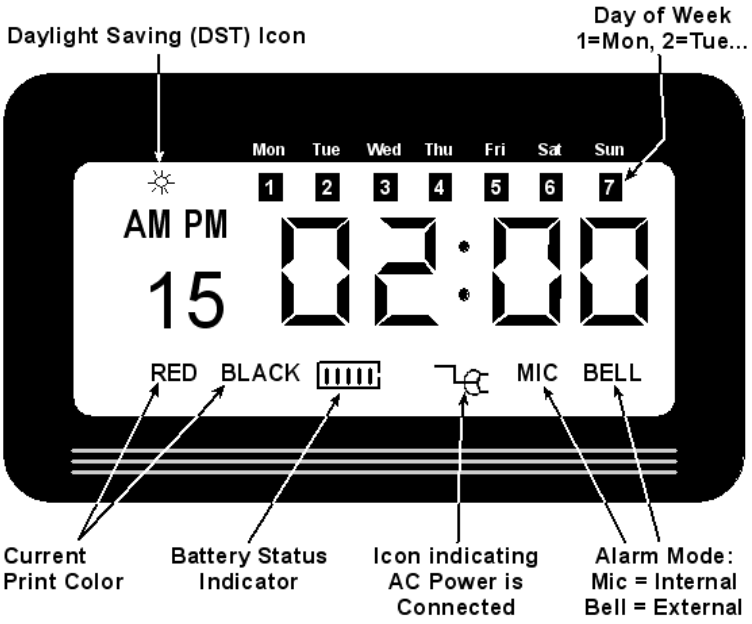
Note: Pressing "All-Reset" on the control panel will reset all Time Recorder settings to their factory defaults.

Clock Overview

Top View

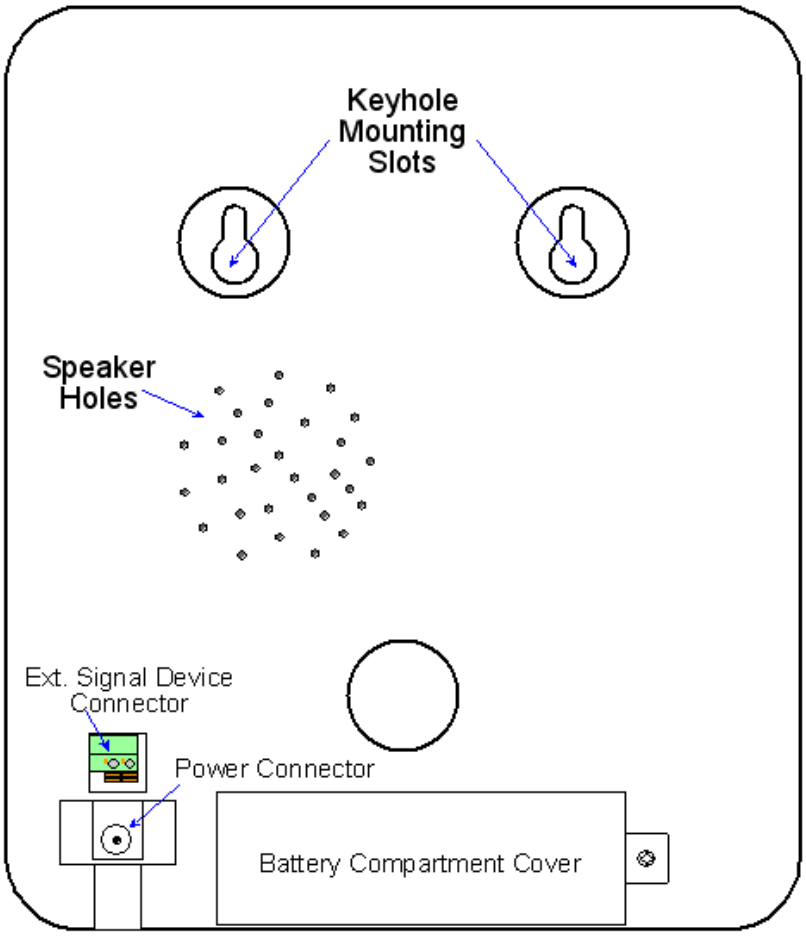


Front View



- Battery Status Indicator: A fully charged Battery will have (5) bars.
- DST Icon: displays when exiting programming mode when DST is turned on.
- Each blink of the colon is one sec.

Rear View



Initial Setup

Setting Year

1. Remove top cover
   a. Locate buttons at the top of the clock labeled P4, P5 and P6
      i. P4 changes values down
      ii. P5 changes values up
      iii. P6 is used to save and select modes
2. Locate the Setup (programming) switch. Move the switch to the left position, you are now in setup mode
3. The mode indicator “01” will be flashing, press P6 to select
4. Press P4 or P5 to select the current year
5. Press P6 to Save

Setting Month/Date

6. The mode indicator “02” will be flashing, press P6 to select
7. Press P4 or P5 to select the current month
8. Press P6 to save
9. Press P4 or P5 to select the current date
10. Press P6 to save

Setting Time

11. The mode indicator “3” will be flashing, press P6 to select
12. Press P4 or P5 to select the current hour
13. Press P6 to save
14. Press P4 or P5 to select the current minute
15. Press P6 to save

Setting Day Advance Time

16. The mode indicator “04” will be flashing, press P6 to select
17. Complete steps 11-15

Setting Pay Period

18. The mode indicator “05” will be flashing, press P5 to switch to mode “06”
19. The mode indicator “06” will be flashing, press P6 to select
20. Select the pay period type by pressing P4 or P5
    a. If the pay period is monthly select 00
    b. If the pay period is weekly select 01
21. Press P6 to save
22. To select the end of the weekly pay period you must select 07
23. Press P6 to save

Setting Clock Display Format

24. The mode indicator “07” will be flashing, Press P6 to select
25. Press P4 or P5 to select the clock display format
    a. You can choose between the 12 hour or 24 hour (military time) format
26. Press P6 to save

Setting Start and End of DST

27. The mode indicator “08” will be flashing, press P5 to switch to mode “09”
28. The mode indicator “09” will be flashing, press P6 to select
29. Press P4 or P5 to select the correct month (US-March)
30. Press P6 to save
31. Press P4 or P5 to select the correct date
32. Press P6 to save
33. Press P4 or P5 to select the correct start time (US-2am)
34. Press P6 to save
35. Complete steps 29-34 to complete the set up for the end of DST

Setting Print Format

36. The mode indicator “10” will be flashing, press P6 to select
37. Press P4 or P5 to select the correct print format
    a. 00 – 24 hour (Military Time)
    b. 01 – Decimal Hours
    c. 02 – 12 hours (pm)
38. Press P6 to save

Setting Time Card Recognition

39. The mode indicator “11” will be Flashing, press P6 to select
40. Press P4 or P5 to select the correct the correct time card format
    a. 00 – Monthly, Semi-Monthly
    b. 01 – Weekly, Bi-Weekly
41. Press P6 to save

Initial setup is complete. Locate the program switch and move it to the up position. Replace top cover.

Features and Specifications

Clock Features

Display Language	English
Operation Mode	Stand-alone (No PC Interface)
Operational Battery Backup	Optional
Auto Card Feeder	Yes
Printing Method	9-Pin Dot Matrix
Two Color Printing	Yes
Perpetual Calendar	Yes
Auto Fix Positioning	Yes
Power Failure Printing	Yes
Power Failure Memory Retention	Yes
Display Format	12 or 24 hour
Print Format	12 hr, 24 hr, decimal time
External Alarm	Connection Available
Auto Column Changing	Yes
Compatible with Wkly Time Card	Yes (Card Recognition *Off*)
Card Recognition (front/back)	Yes

Clock Specifications

Miscellaneous

Input Voltage	DC 18v
Input Current	1.5A
Anti-static Strength	< 15KV
Operational Relative Humidity	10 – 60%
Operational Temperature	0 – 40º C (32 – 104º F)
Storage Relative Humidity	10 – 80%
Storage Temperature	-10 – 60º C (14 – 140º F)
Dimensions (Clock)	196 (w) x 239 (h) x 126 (d) mm
Dimensions (Boxed)	266 (w) x 283 (h) x 208 (d) mm
Weight (Clock Only)	4.0 Lb
Weight (Boxed)	5.6 Lb
Operational Battery Pack Wt.	0.7 Lb
Time Card Dimension	185mm L x 86mm W
Time Card Weight	300#
Circuit Board Battery	CR2032 (2 yr life)

Ribbon Life

The ATR242 ribbon (39-0135-000) will typically last 3 months with 50 employees punching 6 times per day (~18,000 punches). Actual ribbon life will vary based on the number of punches, humidity, temperature, exposure to air.

Operational Battery Pack

The optional operational battery pack (58-0114-000) is a 12 cell NiMH (Nickel Metal Hydride) battery pack that recharges when the ATR240 is plugged in. In the event of a power failure the clock will instantly switch to battery power without any interruption in service. The operational battery pack allows for full operation of the clock. The LCD backlight is not activated when the clock is running on battery power as a power saving feature, however the LCD display is plainly visible in a lighted room.

Battery Pack Specs:

Voltage: DC 14.4v

Capacity: 1800mA

Standby mode: 30-36hr reserve power

Fully charged: 5 days use (300 punches/day)

Note: Actual battery life depends on many factors such as battery age, temperature, discharge history, etc., and can vary greatly depending on these factors.

The ATR240 should be plugged in for 12 hours to fully charge the battery pack.

For more information see **"**Installing the Operational Battery Pack" in the Appendix.

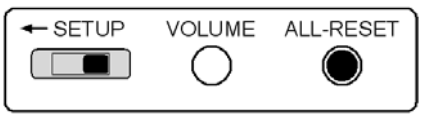
Warning:

Batteries may leak, overheat, catch fire or explode if proper safety & handling procedures are not followed:

- DO NOT get batteries wet
- DO NOT place batteries near heat sources
- DO NOT use any power supply other than the original one supplied with the time recorder.
- DO NOT inverse polarity connection
- NEVER throw batteries into fire. Properly dispose of batteries according to local rules and regulations.
- DO NOT allow anything to short circuit the batteries
- Dropping a battery may damage the battery. Replace the battery if you suspect any damage.

Internal View

(Internal Control Panel)



Re-setting Time Recorder to Factory Defaults

The "All-Reset" button on the internal control panel resets Time Recorder settings such as date, time, print/display formats, to the factory defaults. See chart for factory defaults. Note: The button is recessed to prevent accidentally resetting the Time Recorder settings. Use the point of a pen or paperclip to access the button. It will take approximately 9 seconds to complete the reset.

Troubleshooting

Symptom	Possible Problem	Solution
Clock does not power on	Power Outage	Check circuit breaker. Wait for power to be restored
	The power source was not properly connected	Check the connections of the power supply and/or backup battery
The time is incorrect	The time was not set correctly.	Set correct time
	Prolonged power outage.	Set time after power is restored
The clock keeps losing time	The coin cell battery on the motherboard needs to be replaced.	Replace the coin cell on the motherboard.
Display Off, Clock has Power	Defective Motherboard	Contact Local Dealer or Acroprint for repair
	Defective LCD display	
The date is incorrect	The date was not set correctly	Set correct date
Clock beeps and rejects time card	Wrong side of card is inserted (monthly card)	Flip card over and re-insert
	Incompatible time card	Use card approved for the ATR240
Print too light	Ribbon cassette not properly seated.	Remove and re-insert ribbon cassette correctly
	The print ribbon is dried out	Replace ribbon cassette
Punches print in wrong column	Wrong column selected (manually selected) or column change time set incorrectly.	Select the correct column (P1 – P6) or set the correct column change time

Symptom	Possible Problem	Solution
Punches print on wrong row	The End of Day set incorrectly	Set End of Day correctly
	Time Card Format set incorrectly	Set Time Card Format correctly
	Pay period type is set incorrectly	Set Pay Period type correctly
Display is in AM/PM hours but clock prints in 24Hr format	The clock display format and print format are independent. You must make sure each is set correctly.	Set the display format correctly Set the print format correctly
Clock is printing in wrong color	Ink Color Change Time set incorrectly	Set the Ink Color Change Time correctly
Clock print location is a little off	Clock printing position needs to be adjusted.	Adjust the clock print position
Print registration is faint or not visible at all	Ribbon cassette not firmly seated.	Press down firmly on ribbon cassette until it clicks into place.
	Ribbon is stuck.	Turn ribbon advance knob clockwise. If ribbon will not advance remove cassette and try advancing again. If ribbon won't advance replace ribbon.

Frequently Asked Questions

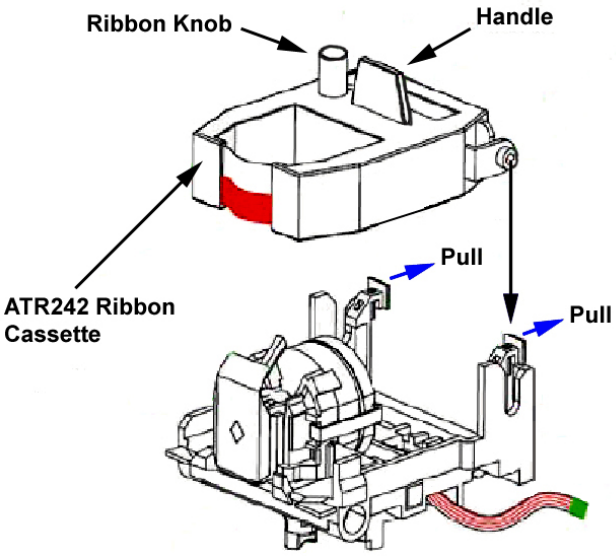
1. Q: The display does not work or parts of it do not work.
   A: Possible Causes:
   a. Motherboard is defective
   b. The LCD display is defective.
   Correction: Contact your local dealer or Acroprint for repair.
2. Q: Can my clock calculate the pay period total?
   A: No. The ATR240 does not offer time total calculation.
3. Q: Why does the clock keep rejecting the time card?
   A: Check to see if the correct side of the Time Card is inserted. If Time Card Recognition is turned on your Monthly Time Card must be inserted with the current date on the front side. If you are using a Weekly Time Card make sure Time Card Recognition is turned off.
4. Q: Why didn't the time recorder setting I changed not work?
   A: Make sure you press [P6] after you enter your setting.

5. Q: Why is my clock printing on the wrong row?
   A: - Make sure the date is set correctly.
   - Make sure the “End of Day” time is set correctly.
   - For Weekly pay periods make sure the "End Day of Pay Period" is set correctly.
   - Make sure the Pay Period type is is set correctly.
6. Q: I can’t get my clock to print for any employees. It just keeps giving an “err” message.
   A: Make sure the display time is synchronized to the RTC time.

For more info on troubleshooting or general “how to” info go to:
http://support.acroprint.com

Maintenance

Replacing the Ribbon Cassette

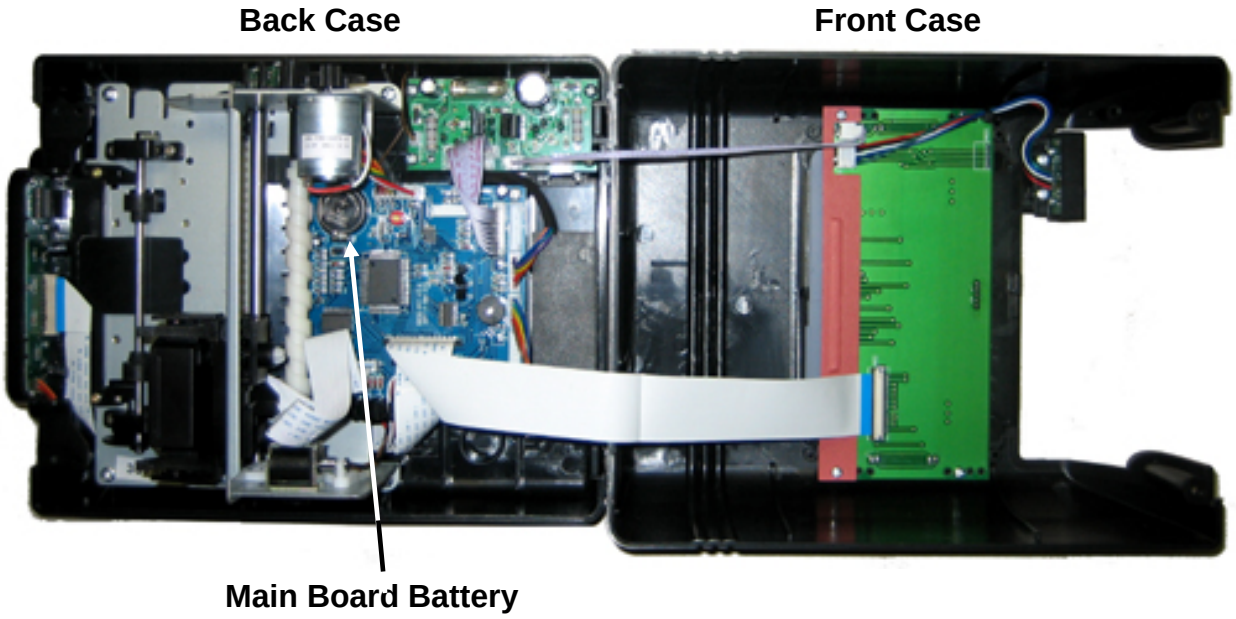


1. Open clock cover. Press [P3] to move the print head to the center of the clock so that the ribbon cassette can be more easily accessed.
2. Pull the ribbon holder tabs towards you to unlock the ribbon cassette and use the handle on top of the ribbon to pull the cassette out.
3. Insert replacement ribbon. Make sure to feed the ribbon over the black ribbon guide and slide the ribbon down between the guide and the silver print shield. Push the ribbon down until it clicks into place. Turn the ribbon knob clockwise to remove any slack in the ribbon.

Replacing the Circuit Board Batteries

The ATR240 is equipped with (1) CR2032 3v Lithium Coin Cell battery on the Main board. The battery should last approximately 1.5 to 2 years under normal operating conditions. Do not attempt to replace the battery as it will void your warranty. If your clock is already out of warranty you can attempt to replace the batteries yourself but note that you could damage the board if you short out any components on the circuit board. Avoid using metal objects to remove the batteries.

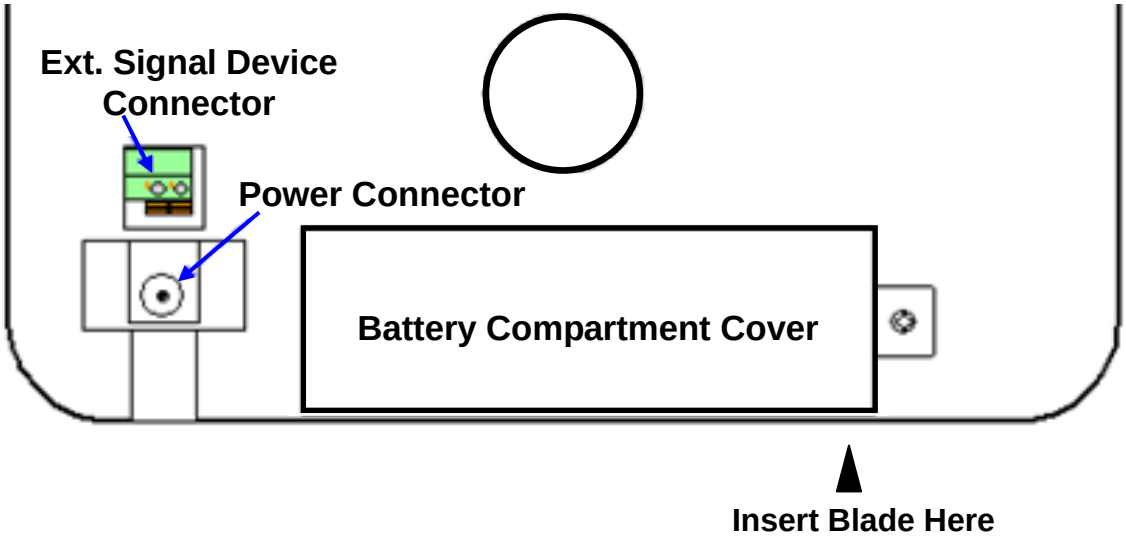
Note: all Time Recorder settings will be reset to factory defaults as soon as the Main board battery is removed.



1. Unplug clock.
2. Remove the front cover and the two screws that connect the front and back case. Remove the front case and lay it flat being careful not to pull any wires or cables loose.
3. To remove batteries press the metal retaining clip away from the battery. The battery should pop up. It may be necessary to use a small probe to pop the battery out.
4. Replace the batteries and re-assemble clock.

Installing the Operational Battery Pack

First unplug the clock. The door to the battery pack compartment is located on the bottom edge of the back of the clock. Remove the screw that secures the door. The door may be tightly fitted. Insert a thin knife blade under the bottom of the door at the screw end and rotate the blade to open the door.



Connect the battery cable to the connector on the left side of the compartment. Note that the two ridges on the side of the battery connector should be facing down to line up with the slots in the clock's power connector. Turn the battery so that the cable connection is on the bottom. Insert the battery pack into the clock with the wires inserted into the opening in the side of the compartment. This is important since the battery door can't be attached if the battery is sitting on top of the wires. You may need to use something like a pencil or ruler to push the wires into the opening. Attach the door by inserting the door tabs into the left side of the compartment and firmly rotating the door into place. If the door won't close check to make sure the wires aren't under the battery. Plug in the power supply once the battery door is secure. The ATR240 should be plugged in for 12 hours to fully charge the battery pack.

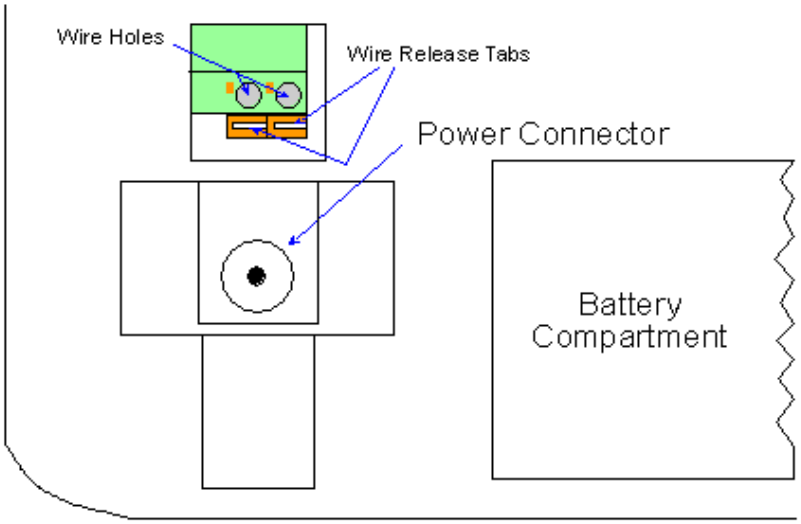
Cleaning the ATR240

Do not use cleaning products that contain alcohol or other strong chemicals as they could discolor or crack the terminal housing. Use a soft damp cloth to remove dirt. Wipe dry.

Appendix

Connecting External Signal Devices (Bells & Horns)

The connections for an external signal device (bells, horns, buzzers, chimes, etc.), are made via a 2-wire Green terminal block on the back of the clock above the power jack. Connections are made by pressing the orange wire release tabs below each wire hole, fully inserting the wire and releasing the clip. Gently pull on the wires to make sure they are firmly secured in the terminal block.



Clock Back Housing, Lower Left Corner

In order to use a bell or horn a relay is required. Please call Acroprint or your Dealer to order the relay (PN 01-0230-000).

When a signal is activated by the clock the internal contacts of the relay close and complete the circuit. These internal contacts are "dry" and supply no voltage. Voltage applied to these contacts must not exceed 30 volts. The relay then activates the 120v external signal device such as:

65-0103-000 "Grille Horn"
65-0104-000 "4-1/4" Bell"
65-0105-000 "8" Bell"

For more information about connecting an external signal device using a relay go to

http://support.acroprint.com

Under “Time Clocks & Document Stamps” click on “ATR240 Time Clock” and download 06-0346-000 “Connecting an External Signal Device.”

Wall Mounting Instructions

The ATR240 can be placed on a table or desk and it can also be mounted to a wall. A mounting template is included with the documents for the ATR240. If you misplace the template you can download it at:

http://support.acroprint.com

Under “Time Clocks & Document Stamps”, click on “ATR240 Time Clock”.

Follow the instructions on the template to mount the clock.

Supplies, Parts & Accessories

Part#	Description
01-0230-000	24 Volt Switching Relay Kit
01-0270-000	ATR360 Biometric/Proximity Time Recorder
01-0270-001	ATR240 Time Recorder
06-0400-000	ATR360 User Manual (available on web)
06-0400-001	ATR240 User Manual (available on web)
06-0401-000	Mounting Template (available on web)
09-7000-000	ATR241 Weekly Time Card (pack of 250)
09-7001-000	ATR241 Monthly Time Card (pack of 250)
39-0135-000	ATR242 Red/Black Ribbon Cassette
45-0182-000	ATR240/360 Case Keys (set of 2)
56-0135-000	18v DC Power Supply (w/removable US plug)
58-0114-000	ATR240/360 Operational Battery Pack
58-0111-000	CR2032 3v Lithium Coin Cell Battery
64-0103-000	Grille Horn, 120vAC 50/60Hz
64-0104-000	4-1/4" Bell, 120vAC 50/60Hz
64-0105-000	8” Bell, 120vAC 50/60Hz
75-0185-000	US Power Plug (for 56-0135-000)
75-0185-001	Euro Power Plug (for 56-0135-000)
75-0185-002	UK Power Plug (for 56-0135-000)

An updated list of accessories with pricing can be found on the web at: **www.acroprint.com**

For your reference, fill out the information below and keep it in a safe place.

Model Number _____

Serial Number _____

Date Purchased _____

Purchased From _____

Location _____

Telephone Number _____